REMARKS

Consideration of this Preliminary Amendment is requested prior to examination of the subject application. No new matter is presented by virtue of this amendment.

Claims 1 through 12 are pending in the subject application. Claims 1-12 stand finally rejected under 35 U.S.C. 103(a). Claims 1, 2, and 12 have been amended.

Amendments to claims 1, 2, and 12 have been made without the intention to surrender any of the equivalents to the subject matter therein.

The Applicants appreciate the Examiner's thorough examination of the subject application. However, the Applicants respectfully request reconsideration of the subject application based on the following remarks.

35 U.S.C. § 103(a) REJECTION

In a Final Office Action, the Examiner rejected claims 1, 2, and 12 under 35 USC 103(a) as being unpatentable over admitted prior art in view of U.S. Patent Number 5,537,235 to Ishihara, et al. ("Ishihara" or the "Ishihara Reference") further in view of U.S. Patent Number 4,526,818 to Hoshikawa, et al. ("Hoshikawa" or the "Hoshikawa Reference"); claims 3-7 and 10-11 under 35 USC 103(a) as being unpatentable over admitted prior art in view of Ishihara and Hoshikawa further in view of U.S. Patent Number 6,104,467 to Nakahara, et al. ("Nakahara" or the "Nakahara Reference"); and claims 8-9 under 35 USC 103(a) as being unpatenable over admitted prior art in view of Ishihara, Hoshikawa, and Nakahara further in view of U.S. Patent Number 6,327,011 to Kim ("Kim" or the "Kim Reference"). The Applicants respectfully traverse these rejections for the reasons provided in greater detail below.

The invention as claimed provides a cell gap that is formed so that, at room temperature, the gap gradually and continuously increases from the center of the display area to the ends of the display area. See, e.g., Specification, page 6, lines 12-18. This arrangement makes it possible to smooth out thermal

expansion differences and, at high temperatures, to prevent a cell gap from being too large at the center of the display area. See, e.g., Id., page 6, line 22 to page 7, line 2. The art cited by the Examiner addresses the thermal expansion difference problem; however, none of the cited references prevent a cell gap from being too large at the center of the display area at high temperatures.

With Ishihara, at room temperature, there is a uniform gap in the middle portion and only at the two edge portions is there a gradual increase in the gap distance. Thus, Ishihara only makes the effects of temperature more uniform is the edge portions. Ishihara does not address the effects of temperature change at the center of the cell. Accordingly, Ishihara does not teach, mention or suggest a cell gap that gradually and continuously increases from the center of the display area to the ends of the display area.

The Applicants re-assert their disagreement with the Examiner's contention that Hoshikawa FIG. 8 discloses a cell gap that increases from a center to an end of the display area. On the contrary, Hoshikawa teaches LCD panels arranged to provide a uniform cell thickness over the entire surface area of the cell. See, e.g., Id., col. 5, lines 14-21; col. 6, lines 64-68; col. 7, lines 42-47; and col. 7, line 67 to col. 8, line 2. Indeed, one of the stated benefits of Hoshikawa is that of a uniform gap thickness. See, e.g., col. 11, lines 39-48. Thus, Hoshikawa expressly teaches away from providing a cell gap that increases gradually and continuously from the center to the end of the display area and is, therefore, improperly relied on by the Examiner in rejecting claims 1, 2, and 12.

FIG. 8 of Hoshikawa merely shows manufacturing substrates 110 and 220 to provide an inward force during assembly. Id., col. 11, lines 59-60. FIG. 9 of Hoshikawa illustrates the finished product (as well as FIGs. 1-6) in which the cell gap is uniform and there is no gradual increase. The arrangement disclosed by Hoshikawa is totally different from the present invention and certainly does not teach a cell gap that increases from the center to an end of the display area.

The Applicants respectfully maintain that the Examiner has not made a prima facie case of obviousness. Ishihara teaches deficiencies in the prior art that are rectified by the invention as claimed. Furthermore, Hoshikawa teaches a uniform cell gap. There is nothing in either reference that suggests,

mentions, teaches or provides motivation to provide an LCD with a cell gap that increases gradually and continuously from its center to the ends.

Accordingly, the Applicants respectfully assert that, claims 1, 2, and 12 are not made obvious by the admitted prior art in view of the Ishihara and Hoshikawa references.

Claims 3-7 and 10-11

The Examiner admits that Nakahara is a secondary reference and, impliedly, the Nakahara reference also cannot make up for the deficiencies of the Ishihara and Hoshikawa references. As provided in our earlier response, Nakahara neither teaches, mentions nor suggests resolving irregular display color of an LCD device resulting from a change in an atmospheric temperature by means of controlling the cell gap distance, and, more particularly, by forming a cell gap between a pair of insulating substrates so as to increase gradually and continuously from the center to the ends of the display area at room temperature.

Accordingly, the Applicants respectfully assert that, claims 3-7 and 10 are not made obvious by the combination of the three references.

Claims 8-9

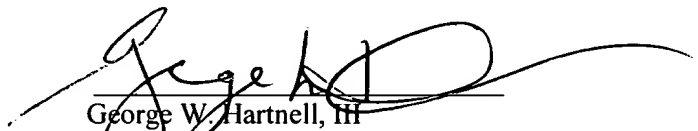
The Examiner similarly admits that Kim is a secondary reference and, impliedly, the Kim reference cannot make up for the deficiencies of the Ishihara, Hoshikawa, and Nakahara references. Indeed, the Kim reference neither teaches, mentions nor suggests resolving irregular display color of an LCD device resulting from a change in an atmospheric temperature by means of controlling the cell gap, and, more particularly, by forming a cell gap between the pair of insulating substrates so as to increase gradually and continuously from the center to the ends of the display area at room temperature.

Accordingly, the Applicants respectfully assert that, claims 8-9 are not made obvious by the combination of the four references.

In short, it is respectfully submitted that, claims 1-12 are not made obvious by any of the cited references, and further, satisfy all of the requirements of 35 U.S.C. 100, et seq., especially § 103(a). Accordingly, claims 1-12 are allowable. Moreover, it is respectfully submitted that the subject application is in condition for allowance. Early and favorable action is requested.

The Applicants believe that no additional fee is required for consideration of the within Preliminary Amendment. However, if for any reason the fee paid is inadequate or credit is owed for any excess fee paid, you are hereby authorized and requested to charge Deposit Account No. **04-1105**.

Respectfully submitted,



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George W. Hartnell, III
Reg. No. 42,639
Edwards & Angell, LLP
P.O. Box 9169
Boston, MA 02209-4280
(617) 517-5523 (phone)
(617) 439-4170 (fax)

Customer No. 21,874

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